

**CLAIMS:**

1. (Currently amended) A method of promoting neurogenesis comprising the step of:

administering a therapeutic amount of a therapeutic compound for increasing levels of cGMP to a patient in need of neurogenesis promotion post stroke wherein increased levels of cGMP promote neurogenesis.

2. (Currently amended) A compound for promoting neurogenesis comprising an effective amount of a therapeutic compound that increases levels of cGMP, sufficient to promote neurogenesis, wherein increased levels of cGMP promote neurogenesis.

3. (Currently amended) A neurogenesis promoter comprising a therapeutic compound in a pharmaceutically acceptable carrier that increases levels of cGMP, said therapeutic compound capable of promoting neurogenesis wherein increased levels of cGMP promote neurogenesis. ~~in a pharmaceutically acceptable carrier.~~

4. (Previously presented) The neurogenesis promoter according to claim 3, wherein said therapeutic compound augments nitric oxide in a tissue.

5. (Currently amended) The neurogenesis promoter according to claim 4, wherein said nitric oxide donor is selected from the group consisting essentially of phosphodiesterase inhibitors, L-arginine, sildenafil, and atorvastatin.

6. (Currently Amended) A method of augmenting the production of neurons by administering an effective amount of a therapeutic compound that increases levels of cGMP, ~~nitric oxide donor~~ to a site in need of augmentation, wherein increased levels of cGMP augment the production of neurons.

7. (Currently amended) A method of increasing neurological function by administering an effective amount of a therapeutic compound that increases levels of cGMP to a patient in need of increased neurological function after neurological damage has occurred, whereby the increased levels of cGMP create neurogenesis, thereby increasing neurological function.

8. (Currently amended) A method of increasing cognitive and neurological function by administering an effective amount of a therapeutic compound for that increasing increases levels of cGMP to a patient in need of increased cognitive and neurological function after neurological and cognitive damage has occurred, whereby the increased levels of cGMP create neurogenesis, thereby increasing neurological function.

9. (Currently amended) A method of promoting neurogenesis comprising the step of administering an effective amount of a compound for increasing levels of cGMP in a patient in need of neurogenesis promotion, wherein increased levels of cGMP promote neurogenesis.

10. (Currently amended) A method of augmenting the production of neurons by administering an effective amount of a compound for increasing cGMP levels at a site in need of augmentation, wherein increased levels of cGMP augment the production of neurons.

11. (Currently amended) A method of increasing neurological function by administering an effective amount of a compound for increasing levels of cGMP in a patient in need of increased neurological function, wherein increased levels of cGMP increase neurological function.

12. (Currently amended) A method of increasing cognitive and neurological function by administering an effective amount of a compound for

increasing levels of cGMP in a patient in need of increased cognitive and neurological function, wherein increased levels of cGMP promote neurogenesis, thereby increasing cognitive and neurological function.

13. (Currently amended) A compound for increasing *in vivo* levels cGMP for use in generating neurons, wherein increased levels of cGMP promote neurogenesis.